

Mineral Industry Surveys

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NICKEL IN MAY 2006

Reported domestic nickel consumption in May, on a daily average basis, decreased about 12% compared with that of April and increased about 21% compared with that in May 2005, according to the U.S. Geological Survey. Sales of nickel to platers averaged about 28 metric tons per day in May, about 17% higher than those of April. Imports of nickel for

consumption for the year to date through April, excluding wrought nickel, were about 10% higher those of the same period in 2005. Trade data for May will appear in a subsequent report. Percentages reported in this paragraph are based on data concealed to avoid revealing individual company proprietary

 $\label{eq:table 1} \textbf{TABLE 1}$ CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND \textbf{USE}^1

(Metric tons, nickel content)

	Cathodes,		Oxide-sinter,			
	pellets,		salts, and		Total	
	briquets, and		other		year to	
Period	powder	Ferronickel	forms	Total	date	
2005:						
May	5,010	520	41	5,570	28,400	
June	5,440	541	44	6,020	34,400	
July	4,590	378	38	5,010	39,400	
August	5,060	437	42	5,540	45,000	
September	5,190	658	44	5,900	50,800	
October	5,230	708	44	5,980	56,800	
November	5,220	585	57	5,860	62,700	
December	4,750	619	52	5,420	68,100	
January-December	61,100	6,450	544	68,100	XX	
2006:	_					
January	6,760	831	71	7,660	7,660	
February	6,390	842	66	7,300	15,000	
March	6,400 ^r	776	68	7,250 ^r	22,200	
April	6,530	788	59	7,380	29,600	
May:						
Steel:	_					
Stainless and heat resisting	2,420	850	W	3,270	16,800	
Alloy (excludes stainless)	374			374	1,720	
Superalloys	1,180		W	1,180	5,940	
Copper-nickel alloys	W			W	W	
Electric, magnetic, and expansion alloys	14			14	71	
Other nickel & nickel alloys	W		W	W	W	
Cast iron	W			W	W	
Electroplating (sales to platers)	880			880	4,210	
Chemical and chemical uses	W			W	W	
Other uses	954		59	1,010	7,540	
Total reported	5,820 2	850	59	6,730	36,300	
Total all companies (calc) ³	XX	XX	XX	13,200	71,300	
2006: January-May	31,900	4,090	325	36,300	XX	
2005: January-May	25,600	2,520	225	28,400	XX	

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Of consumption, 3,520 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

³Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (50.94%) to apparent primary consumption for 2004.

TABLE 2 ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS, BY FORM AND USE $^{\!1,2}$

(Metric tons, nickel content)

	Cathodes, pellets,		Oxide-sinter,	
	briquets, and		salts, and	
Period	powder	Ferronickel	other forms	Total
2005 ¹				
May	2,000	274	144	2,420
June	1,860	310	132	2,300
July	1,610	283	141	2,030
August	1,680	276	139	2,100
September	1,680	273	153	2,110
October	1,660	279	147	2,090
November	1,720	307	147	2,170
December	2,050	300	146	2,500
2006:				
January	1,830	300	153	2,280
February	1,960	354	154	2,470
March	1,880 ^r	409	154	2,440 r
April ^r	2,100	332	170	2,610
May:				
Steel (stainless, heat resisting and alloy)	419	279	(3)	698
Nonferrous alloys ⁴	1,800	W	(3)	1,800
Foundry (cast irons)	(3)	W		(3)
Chemical (catalysts, ceramics, plating				
salt, etc.) and unspecified uses	130	W	167	297
Total	2,350	279	167	2,800

^rRevised. W Withheld to avoid disclosing company proprietary data. -- Zero.

 ${\bf TABLE~3}$ Consumption and ending stocks of purchased secondary nickel, by ${\bf use}^1$

(Metric tons, nickel content)

	-	Consumption		Stocks				
	Ferrous	Nonferrous	Total	Ferrous	Nonferrous	Total		
Period	scrap ²	scrap ³	scrap	scrap ²	scrap ³	scrap		
2005:	•	·			•			
May	3,790	776	4,560	2,620	93	2,710		
June	4,520	698	5,220	2,810	115	2,930		
July	4,120	658	4,780	2,740	102	2,840		
August	4,360	748	5,110	2,630	113	2,740		
September	4,490	709	5,200	2,800	99	2,900		
October	5,000	638	5,640	3,010	110	3,120		
November	5,520	611	6,130	2,630	98	2,730		
December	4,530	593	5,130	2,470	89	2,560		
January-December	56,200	8,380	64,600	XX	XX	XX		
2006:	_							
January	3,710	708	4,420	2,600	100	2,700		
February	4,130	654	4,790	2,850	92	2,950		
March	4,290	800	5,090	2,930	93	3,030		
April	5,250	706	5,960	2,660	98	2,760		
May	4,340	657	4,990	2,760	103	2,860		
Total	21,700	3,530	25,200	XX	XX	XX		

XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Stocks held by companies that consume nickel in more than one end-use category are credited to the major category. Stocks are subject to revisions owing to inventory adjustments.

³Included in the "Chemical and unspecified uses" category.

⁴Includes superalloys, nickel-copper and copper-nickel alloys, permanent magnet alloys, and other nickel alloys.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Nickel content is calculated from an average nickel content and the reported gross weight of scrap.

³Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

 ${\bf TABLE~4} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~NICKEL,~BY~COUNTRY}^1$

(Metric tons, nickel content)²

				Metal-						
	Cathodes,	Powder		lurgical-	Waste	Stainless			Total	
Period and country	pellets, and	and	Ferro-	grade	and	steel		2	year to	Wrought
of origin	briquets	flakes	nickel	oxide	scrap	scrap	Chemicals	Total ³	date ⁴	nickel
2005:	_									
April	11,100	813	1,820	325	515	1,070	316	16,000	56,900	65
May	9,140	866	1,260	257	595	831	407	13,400	70,300	75
June	9,010	335	2,470		583	776	308	13,500	83,800	119
July	9,050	543	1,700		633	624	177	12,700	96,500	89
August	10,500	772	1,370		447	402	295	13,800	110,000	116
September	9,410	500	1,890		645	443	294	13,200	123,000	94
October	8,410	794	728	17	719	505	286	11,500	135,000	63
November	9,690	714	1,240	107	689	581	277	13,300	148,000	94
December	7,310	423	877	110	608	731	291	10,400	159,000	128
January-December	110,000	8,120	19,300	1,540	7,170	8,340	3,620	159,000	XX	1,060
2006:										
January	11,800	971	864	80	651	717	307	15,400	15,400	76
February	9,740	575	1,310	177	379	771	435	13,400	28,800	74
March	12,300	695	1,530	67	567	817	369	16,400	45,200	124
April:										
Australia	1,060				27			1,090	5,260	(5)
Brazil	100							100	872	
Canada	5,340	414		121	70	913	11	6,870	25,000	
China	97	2			5		(5)	104	344	(5)
Colombia			265			9	(5)	274	929	
Dominican Republic			780					780	3,340	
Finland	553	34					71	658	3,330	
France	143				117		15	275	1,100	40
Germany	- 	1			38		41	80	321	19
Japan	-	2			20		39	61	247	5
Mexico					21	139	2	162	932	
New Caledonia			251					251	701	
Norway	1,550							1,550	5,940	
Russia	3,850	140						3,990	11,200	
South Africa	,	60						60	318	
Sweden		3						3	9	
United Kingdom	12	59			233	24	6	334	1,070	9
Zimbabwe	214							214	468	
Other		155 ⁶			90	16	102	363	956	10
Total	12,900	870	1,300	121	621	1,100	287	17,200	62,400	83
2006: January-April	46,800	3,110	4,990	447	2,220	3,410	1,400	62,400	XX	357
2005: January-April	38,000	3,170	7,760	1,050	2,250	3,450	1,290	56,900	XX	281
XX Not applicable Zer		3,170	7,700	1,030	2,230	3,430	1,290	50,500	ΛΛ	201

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

³Excludes wrought nickel.

⁴May include revisions for prior months.

⁵Less than ½ unit.

⁶All or part of these data have been referred to the U.S. Census Bureau for verification.

 $\label{eq:table 5} \text{U.S. EXPORTS OF NICKEL, BY COUNTRY}^1$

(Metric tons, nickel content)²

				Metal-						
	Cathodes,	Powder		lurgical-	Waste	Stainless			Total	
Period and country	pellets, and	and	Ferro-	grade	and	steel			year to	Wrought
of destination	briquets	flakes	nickel	oxide	scrap	scrap	Chemicals	Total ³	date	nickel
April	82	190	6	4	902	5,710	344	7,230	22,500	104
May	84	373	11	2	777	3,230	452	4,930	27,400	129
June	168	176	9	2	523	2,950	460	4,280	31,700	214
July	173	113	4	3	814	3,020	335	4,460	36,200	105
August	91	84		1	1,270	3,350	506	5,300	41,500	156
September	147	85	4	5	1,150	3,950	315	5,650	47,100	105
October	134	148	1	8	1,040	3,450	281	5,070	52,200	94
November	70	116	(4)	5	1,000	3,640	271	5,100	57,300	79
December	80	87	21	33	1,080	4,200	430	5,940	63,200	99
January-December	1,190	1,910	72	234	11,700	43,800	4,230	63,200	XX	1,340
2006:	_									
January	105	107	15	12	1,200	4,100	387	5,920	5,920	158
February	125	87	8	8	860	2,950	370	4,410	10,300	106
March	87	92	5	69	942	2,700	631	4,520	14,900	114
April:										
Australia		(4)			43			43	118	
Belgium		1			143	8	4	156	267	
Canada	- 1	8		1	673	106	107	896	4,130	6
China		(4)	1			1,350	15	1,370	4,890	22
Finland							77	77	2,400	
Germany		16		(4)	13	2	10	41	221	2
India		1				81	1	83	661	7
Italy		1				2		3	997	(4)
Japan	_ 2	4		3	18	125	34	186	666	7
Korea, Republic of	1	4		(4)	19	103	16	143	749	5
Mexico	167	2			(4)		3	172	486	11
Netherlands		1			14	1		16	308	(4)
South Africa				1				1	23	4
Sweden		20			32		(4)	52	116	(4)
Taiwan		8		(4)		612	28	648	1,560	(4)
United Kingdom		8			31	(4)	10	49	342	1
Other	18	37	21	3	3	128	81	291	1,150	86
Total	189	111	22	8	989	2,520	386	4,230	19,100	151
2006: January-April	506	396	50	98	3,980	12,300	1,780	19,100	XX	528
2005: January-April	242	727	21	174	4,090	16,100	1,180	22,500	XX	355

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

³Excludes wrought nickel.

⁴Less than ½ unit.

 $\label{eq:table 6} \textbf{U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY}^{1}$

(Metric tons, gross weight)

Period and country	Unwrought alloyed	Bars, rods,		Plates and		Tubes and	Other alloyed		Total year to
of origin	ingot	profiles	Wire	sheets	Foil	pipes	articles	Total	date
2005:									
April	241	338	486	274	33	143	176	1,690	7,010
May	310	355	662	324	43	148	152	1,990	9,000
June	437	422	558	260	20	159	237	2,090	11,100
July	325	342	603	275	29	64	194	1,830	12,900
August	447	360	462	242	20	172	293	2,000	14,900
September	644	314	500	241	34	176	156	2,070	17,000
October	491	333	480	241	20	170	466	2,200	19,200
November	551	214	629	262	16	286	198	2,160	21,300
December	429	295	552	221	35	183	243	1,960	23,300
January-December	4,840	3,740	6,580	3,150	350	1,850	2,790	23,300	XX
2006:	-								
January	557	379	478	354	6	204	137	2,110	2,110
February	434	292	550	276	2	198	335	2,090	4,200
March	1,040	398	516	302	41	335	204	2,840	7,040
April:									
Australia	90		(2)				(2)	90	1,260
Belgium	13		(2)				(2)	13	103
Canada	22	19	9		(2)	16	3	69	359
China		(2)	5			(2)	45	50	273
France		2	109	12		21	4	148	783
Germany	102	116	158	195	25	116	2	714	2,800
Italy		182	5			5	14	206	611
Japan			3			34	1	38	357
Mexico			(2)			4	4	8	15
Netherlands		1	(2)				5	6	34
South Africa	59							59	135
Sweden		25	167	9		37		238	995
United Kingdom	91	70	3	8		10	19	201	719
Other	23	12	13			8	30	86	519
Total	400	427	472	224	25	251	127	1,930	8,960
2006: January-April	2,430	1,500	2,020	1,160	73	988	803	8,960	XX
2005: January-April	1,200	1,110	2,140	1,080	133	489	855	7,010	XX

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

 $\label{eq:table 7} \text{U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY}^1$

(Metric tons, gross weight)

	Unwrought	Bars, rods,		Plates		Tubes	Other		Total
Period and country	alloyed	and		and		and	alloyed		year to
of destination	ingot	profiles	Wire	sheets	Foil	pipes	articles	Total	date
2005:	_								
April	499	1,350	135	340	8	190	281	2,800	12,400
May	1,200	1,170	158	378	3	191	268	3,370	15,800
June	726	1,220	108	275	5	216	272	2,820	18,600
July	1,130	1,060	170	409	5	211	293	3,280	21,900
August	1,010	1,310	114	301	9	285	360	3,390	25,300
September	565	1,250	92	398	26	237	286	2,850	28,100
October	731	1,100	125	393	27	417	401	3,190	31,300
November	628	1,430	104	335	5	419	288	3,210	34,500
December	762	1,510	65	282	3	243	267	3,130	37,700
January-December	10,400	15,000	1,440	4,200	119	3,000	3,580	37,700	XX
2006:	-								
January	472	1,460	67	358	35	645	251	3,280	3,280
February	411	1,650	91	321	19	277	336	3,110	6,390
March	1,040	1,800	63	473	33	281	360	4,050	10,400
April:									
Australia		(2)	(2)	2		2	1	5	36
Belgium	93	466	11	4		1	1	576	1,870
Canada	14	70	25	48	9	38	24	228	846
China		128	2	20		22	27	199	1,110
France	217	326	1	12	(2)	5	(2)	561	2,000
Germany		88	3	9	(2)	4	2	106	470
India		5	1	1		9	(2)	16	61
Ireland			1	2			(2)	3	8
Israel	42	44	1	1		(2)	(2)	88	586
Italy	51	6	3	7	(2)	2	1	70	267
Japan	425	47	1	11		11	1	496	1,610
Korea, Republic of	4	18	1	77	(2)	3	30	133	454
Mexico	(2)	92	8	15	1	69	122	307	1,350
Netherlands		2	1	3		3	1	10	50
Singapore	2	23	1	9		1	1	37	83
Spain	(2)	(2)		(2)	(2)	(2)	(2)	(2)	54
Sweden				22	19	(2)	5	46	135
Switzerland	(2)	1	1	1	(2)	2	1	6	111
Taiwan	51	23		32	(2)	4	1	111	197
United Kingdom	21	371	7	47	1	7	10	464	1,710
Other	35	20	3	48		62	18	186	1,080
Total	955	1,730	71	371	30	245	246	3,650	14,100
2006: January-April	2,880	6,630	292	1,520	117	1,450	1,190	14,100	XX
2005: January-April	3,610	4,930	502	1,430	36	778	1,150	12,400	XX

XX Not applicable. -- Zero.

 ${\it TABLE~8} \\ {\it NICKEL~CONSUMPTION~IN~CAST~AND~WROUGHT~PRODUCTS} \\$

	Percent	
	Wrought	Cast
May 2006:		
Stainless and heat resisting steels	100	(1)
Alloy steels	100	(1)
Superalloys	90	10
Copper-nickel alloys	96	4
Other nickel-base alloys	100	(1)

¹Less than ½ unit.

Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

TABLE 9 NICKEL PRICES

		Platts Meta	ls Week		American Metal Market
Date	Cathode NY Dealer \$/lb.	LME Cash mean ¹ \$/t	LME Cash mean \$/lb.	18/8 Stainless steel scrap free market \$/long ton (gw)	18/8 Stainless steel scrap Pittsburgh \$/long ton (gw)
2005:					
Average for month of:					
June	7.564	16,154.432	7.328	1,578	1,610
July	6.820	14,570.833	6.609	1,390	1,538
August	6.863	14,886.932	6.753	1,315	1,388
September	6.610	14,223.088	6.451	1,260	1,388
October	5.840	12,396.548	5.623	1,194	1,350
November	5.429	12,111.477	5.494	1,038	1,244
December	5.923	13,425.625	6.090	1,225	1,193
Yearly average	6.814	14,737.960	6.685	1,409	1,469
2006:					
Average for week ending:					
June 2	10.613-10.978	22,566.875	10.236	2,000-2,100	1,800-1,825
June 9	9.796-9.979	21,487.500	9.747	2,000-2,100	2,075-2,100
June 16	8.937-9.980	19,414.000	8.806	1,800-1,850	2,075-2,100
June 23	9.317-9.914	20,091.500	9.113	1,900-1,950	2,075-2,100
June 30	9.656-10.518	21,456.000	9.732	1,925-2,000	2,075-2,100
July 7	10.603-11.477	23,934.500	10.857	2,100-2,200	2,125-2,150
July 14	12.069-13.926	28,182.500	12.783	2,300-2,350	2,125-2,150
July 21	12.021-14.040	27,284.500	12.376	2,275-2,350	2,125-2,150
July 28	12.305-12.928	26,746.000	12.132	2,275-2,350	2,125-2,150
Average for month of:					
January	6.408	14,549.643	6.600	1,379	1,275
February	6.944	14,975.000	6.793	1,497	1,387
March	6.949	14,893.043	6.755	1,499	1,493
April	8.184	17,931.806	8.134	1,656	1,531
May	9.425	21,064.524	9.555	1,909	1,813
June	9.664	20,747.045	9.411	1,963	1,615
July	11.750	26,568.571	12.051	2,275	2,138

¹Mean of the cash buyer price and the cash seller and settlement price.



